



NETWORK FOR **ENGINEERING** WITH **NATURE**

PROJECT FACT SHEET

MAXIMIZING BENEFITS BY SELECTING THE BEST SCALE FOR NATURAL INFRASTRUCTURE IMPLEMENTATION

Natural infrastructure is thought to provide “win-win” outcomes for both ecosystems and communities by providing habitat for key species, recreation opportunities to community members, and protection from severe weather events, among other benefits. However, it is difficult to quantify these benefits from engineering and ecological performance perspectives at larger scales — such as those for an entire watershed — because most measures examine benefits at the individual project scale.

OBJECTIVE

We aim to develop a framework that infrastructure managers can use to understand how the outcomes of individual natural infrastructure projects relate to their broader, landscape-scale contexts and inform decisions around the scale and placement of natural and nature-based features.

APPROACH

We will use field, laboratory, and modeling approaches to evaluate natural infrastructure examples such as large wood additions at multiple spatial and temporal scales.

DELIVERABLES

Based on our findings, we will embed small-scale, project-specific details into a larger river- and watershed-scale tool that infrastructure managers can use to assess ecological outcomes and determine the best scale for implementing natural infrastructure within a watershed.

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